

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A computer-readable medium having stored thereon [[a]] an extended event identifier data structure comprising for use in a computer-aided design and verification system for naming simulation events tracked by instrumentation logic within a simulation model of a compiled digital circuit design that includes one or more design entities described utilizing a hardware description language, wherein said extended event identifier data structure comprises:

an eventname field containing data representing a simulation event; and
an instrumentation entity field containing data representing an instrumentation entity that generates said simulation event;

a design entity field containing data representing an entity name of a design entity from which said simulation event is generated; and

an instantiation identifier field containing data specifying a hierarchical instance of said design entity in which said simulation event is generated by said instrumentation entity.

2. (Original) The computer-readable medium of claim 1, wherein said simulation event is a count event, a fail event, or a harvest event.

3. (Cancelled)

4. (Cancelled)

5. (Currently Amended) The computer-readable medium of claim [[4]] 1, wherein said design entity field and said instrumentation entity field produce define a unique event namespace for each instrumentation entity associated with said design entity.

6. (Currently Amended) The computer-readable medium of claim [[4]] 1, wherein said instrumentation entity field contains the name of an embedded instrumentation entity.

7. (Cancelled)

8. (Currently Amended) The computer-readable medium of claim 1, wherein said simulation event is defined in an instrumentation entity comment, and wherein said data within said eventname field includes the name given assigned to said simulation event within said instrumentation entity description comment.

9. (Currently Amended) The computer-readable medium of claim 1, wherein said design entity name is unique with respect to entity names of other design entities within said simulation model.

10. (Currently Amended) A method for naming and processing [[a]] simulation events during model simulation tracked by instrumentation logic within a simulation model of a compiled digital circuit design that includes one or more design entities described utilizing a hardware description language, said method comprising:

within an extended event identifier data structure:

associating an eventname, an instrumentation entity identifier, a design entity identifier, and an instantiation identifier with a simulation event, wherein said eventname represents a name of said simulation event, said instrumentation entity identifier represents an instrumentation entity that generates said simulation event, said design entity identifier is a design entity name specifying a design entity, and said instantiation identifier specifies a hierachal instance of said design entity in which said simulation event is generated by said instrumentation entity; and

evaluating occurrences of said simulation event within said simulation model in accordance with said design entity extended event identifier.

11. (Original) The method of claim 10, wherein said design entity identifier includes a design entity name, and wherein said associating step further comprises encoding said design entity name within a hardware description language declaration of said simulation event.

12. (Currently Amended) The method of claim 11, wherein said ~~design entity identifier further includes instantiation identifier~~ is a design entity instantiation identifier, and wherein said associating step further comprises encoding said design entity instantiation identifier within said hardware description language declaration of said simulation event.

13. (Cancelled)

14. (Currently Amended) The method of claim 10, ~~further comprising associating an instrumentation entity with said simulation event~~, wherein said instrumentation entity is instantiated within said design entity.

15. (Original) The method of claim 14, further comprising generating at least one instance of said design entity.

16. (Original) The method of claim 15, wherein said generating step further comprises generating an instrumentation instance data structure wherein said simulation event is declared.